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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re the Application of: **KANO, Takashi et al.**

Group Art Unit: 2812

Serial No.: 09/941,982

Examiner: **MULPURI, Savitri**

Filed: **August 30, 2001**

P.T.O. Confirmation No.: 7536

For: **METHOD OF FORMING NITRIDE-BASED SEMICONDUCTOR  
LAYER, AND METHOD OF MANUFACTURING  
NITRIDE-BASED SEMICONDUCTOR DEVICE**

**AMENDMENT UNDER 37 CFR §1.111**

Commissioner for Patents  
Washington, D.C. 20231

November 27, 2002

Sir:

In response to the Office Action dated **June 28, 2002**, please amend the above identified application as follows:

**IN THE CLAIMS:**

Please cancel Claims 6 and 15 without prejudice or disclaimer.

Please amend Claims 1 and 10, as follows:

1. (Amended) A method of forming a nitride-based semiconductor layer, comprising the steps of:
- growing a buffer layer of  $\text{Al}_x\text{Ga}_{1-x}\text{N}$  ( $0 \leq x \leq 1$ ) on a substrate at a growth rate of at least  $7\text{\AA}/\text{sec}$ ; and
- growing a nitride-based semiconductor layer of  $\text{Al}_a\text{B}_b\text{In}_c\text{Tl}_d\text{Ga}_{1-a-b-c-d}\text{N}$  ( $0 \leq a < 1$ ,  $0 \leq b < 1$ ,  $0 \leq c < 1$ ,  $0 \leq d < 1$ ,  $a+b+c+d < 1$ ) on said buffer layer, wherein
- said step of growing the buffer layer comprises growing said buffer layer to have a film thickness in the range from  $50\text{\AA}$  to  $300\text{\AA}$ .

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